UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 May 2007</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-3 and 6-45</u> is/are pending in the application.

  4a) Of the above claim(s) <u>19-45</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-3 and 6-18</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>29 May 2007</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a) ☐ All b) ☐ Some * c) ☐ None of:

  1. ☐ Certified copies of the priority documents have been received.

  2. ☐ Certified copies of the priority documents have been received in Application No. _____.

  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1/29/07, 5/29/07</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the Request for Continued Examination filed

on 29 May 2007, the Information Disclosure Statement filed on 29 January 2007, and

the Information Disclosure Statement filed on 29 May 2007.

2.   Claim 1 has been amended.

3.   Claims 4 and 5 have been cancelled by the Applicant.

4.   Claims 1-3, and 6-45 are pending. Claims 19-45 have been withdrawn from a

previous amendment. Claim 1 is an independent claim.

Information Disclosure Statement

5.   The information disclosure statements (IDS) submitted on 29 January 2007 and

29 May 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner.

Drawings

6.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because reference character "370" has been used to designate composition info

element, font element, field modifiers, and Field Table in FIG 22. Corrected drawing

sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if

only one figure is being amended. Each drawing sheet submitted after the filing date of

an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

7.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the following reference sign(s) mentioned in the

description: 374, 376, and 378. Corrected drawing sheets in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being

amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

9.   Claims 1-3, and 6-18 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

For your reference, below is a section from MPEP 2105 :

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory. **Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.**

10.   Claims 1-3 and 6-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be claiming "software systems" i.e. systems without hardware indication, which is a computer program per se. Since the claims disclose computer program per se that is not

embodied on a computer readable medium, they appear non-statutory.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 1-3, 6-9, 13-18 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further

view of Bantz et al (US PGPub 2003/0163809, published 8/28/2003)

As per independent Claim 1, Poole et al discloses a system:

- An assembly facility (FIG 1, 3 & 4: disclose document creation by assembling

  components) to apply precedence (Column 5, lines 44-61; Column 6, lines

  55-63: A precedence is in place when one or more matches occur) and rules

  to document content (Col 5, lines 3-24; Col 7, lines 28-60: content is specified

  that must follow rules linked to business or governmental regulations) and

  configured to be coupled to an origination platform (Column 5, lines 1-24:

  content is specified or inputted to be included into the document originated

  from collecting transaction data (Column 29, lines 48-49, STEP 1)

- A knowledge base configured to be coupled to the assembly facility (FIG 3,

  lines 29-48)

- A content management system configured to be coupled to the knowledge base and to support authoring of document content and rules (Poole et al discloses a system spread out over three layers that stores rules, (Column 6, line 34: rules that dictate the access and utilization of components that included in the document) documents and components in the knowledge base.(Column 6, lines 17-28) These rules are used by many applications to govern the document generation that include ability to create documents, and using rules for formatting and validating. (e.g. Col 7, lines 28-60; Column 9-Column 13, line 2)

However, Poole et al discloses his invention is described within the context of an object-oriented programming implementation and that knowledge base acts as a database storing information (Column 6, lines 10-28), but fails to specify the knowledge base to store objects (content) in an object-relational hierarchy. However, Bantz et al discloses the knowledge base is organized as a database that includes being object-relational for storing data objects. (Paragraph 0039, lines 8-10)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Bantz et al's method since Bantz et al's method using database as object-relational would have allowed developers to integrate the database with their own custom data types and methods.

As per dependent Claim 2, Poole et al discloses a system:

- Wherein the assembly facility is configured to validate data received from the origination platform (Column 29, lines 47-48 discloses data being collected. Column 5, lines 3-5, discloses the develop specifies content to be included in the document to meet the rules and regulations. Thus, the data is validated at step 36, FIG 1 wherein all business, legal, and government requirements applicate to a particular entity reference are duly satisfied which produces components having integrity by virtue of being complaint with requirements (rules), Column 5, 15-24)

As per dependent Claim 3, Poole et al discloses a system:

- Wherein the assembly facility is configured to receive transaction information from the origination platform. (document creation originated from collecting transaction data (Column 29, lines 48-49, STEP 1) wherein transaction data is supplied, and then is used for generating documents that includes resolving document entitles described in Column 5, lines 14-24, Col 29, lines 47-64, and for transformations described in Column 17, lines 45-64)

As per dependent Claim 6, Poole et al discloses a system:

- Wherein the assembly facility is configured to generated a resolved, markup language file. (Column 2, lines 40-49: Discloses using the invention to create a World Wide Web page, written in SGML (Column 3, lines 47-54))

As per dependent Claim 7, Poole et al discloses the use of stylesheets, which are document formatting rules, wherein the rules are applied to resolved SGML documents (Column 11, lines 25-35) and for transforming (Column 12, lines 25-26) a SGML document into another SGML document (Column 11, lines 47-50)

However, Poole et al fails to specify the markup language file is an XML file. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transform into another document using a stylesheet. Thus, it would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and Bantz et al's method with using XML file in place of SGML since it benefit of being designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

As per dependent Claims 8 and 9, Poole et al discloses a system wherein the assembly facility is configured to operate with an interface to receive information from the origination wherein the interface is an application programming interface. (Column 9, lines 1-18: Discloses multiple layers used for receiving and sending data operated by APIs)

As per dependent Claims 13-15, Claim 13 recites similar limitations as in Claim 1 and is similar rejected under rationale. Furthermore, Poole et al discloses a knowledge base storing a plurality of information such as content and rules. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated,

it was well known to one of ordinary skill in the art at the time of Applicant's invention that since the database is relational, meaning data is stored in tables, all the content and rules stored in the knowledge base would be stored in tables. In addition, knowledge base stores collection of documents that may been created by Poole, and so, those documents are validate by DTDs, stored in the knowledge base or correspond to the rules of the DTD.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any changes, updates or amendments to data information in one table of a relation database affects that same information in any other table utilizing it.

As per dependent Claims 16-18, Poole et al discloses a knowledge base that include text components that include SGML text components. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated, Poole et al's knowledge base would act as a object-relational database, wherein it was well-known in the art at the time of Applicant's invention that a object-relational database would contain tables that link to the all of the objects within the database.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any

changes, updates or amendments to data information in one table of a relation

database affects that same information in any other table utilizing it.

In addition, Poole et al fails to specifically disclose the text fragments are in XML.

However, it was well-known to one of ordinary skill in the art at the time of Applicant's

invention that XML is a subset of SGML, wherein all features of the SGML language

incorporate into XML document, thus allowing an XML document to be transform into

another document using a stylesheet. Thus, it would been obvious to one of ordinary

skill in the art at the time of Applicant's invention to have combined Poole et al's method

and Bantz et al's method with using XML file in place of SGML since it benefit of being

designed pragmatically, to be compatible with existing standards while solving the

relatively new problem of sending richly structured documents over the web.

13.   Claims 10-12 remain rejected under 35 U.S.C. 103(a) as being unpatentable

over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Bantz

et al (US PGPub 2003/0163809, published 8/28/2003) in further view of Moore et al (US

Patent 5,630,127, published 5/13/1997)

As per dependent Claims 10-12, Poole et al discloses storing data into the

Knowledge Base, but Poole et al and Bantz et al fails to specify disclose the knowledge

base is configured to be loaded by press process and includes a plurality of stored

procedures. However, Moore et al discloses storing rules as objects in a relational

database. (Abstract, line 2-5; Column 4, lines 52-61; Claim 11)

It would been obvious to one of ordinary skill in the art at the time of Applicant's

invention to have combined Poole et al's and Bantz et al's methods with Moore et al's

method since Moore et al's method would have provided the benefit to the user to easily

modify existing rules and create new rules.

Response to Arguments

14.   Applicant's arguments filed 29 May 2007 have been fully considered but they are

not persuasive.

15.   In regard to pages 9-12 in reference to claims 1-3, and 6-18, Applicant argues

that Poole does not disclose applying precedence and rules to document content as in

Poole does not teach or suggest "an assembly facility configured to apply precedence

and rules to document content" as recited in claim 1. Applicant argues applying

precedence involves identifying two or more "matching document components or

multiple possible matches and dynamically choosing one of the "matching" based on the

parameters of the document creation transition. However, the Examiner disagrees.

In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., applying precedence involves identifying two or more "matching document

components or multiple possible matches and dynamically choosing one of the

"matching" based on the parameters of the document creation transition.) are not

recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Based on the written claim language as the claims are written, it states "apply precedence ... to document content" so therefore the showing of matching between two items shows precedence. Therefore, Poole discloses an assembly facility wherein document components (parts of other documents) are assembled to create one final document overall. The document developer specifies the content that is to be included in a document in order to meet the objectives of the parties in a transaction and to meet the rules and regulations. Each of the constituent portions of the document (document content) is associated with an entity reference. Therefore, each entity reference represents a part of the overall document that incorporated into it, and therefore is document content. (Col 5, lines 3-24) Thus, precedence is applied Column 5, lines 44-52; Column 6, lines 55- Col 7, line 27: A precedence is in place when one or more matches occur wherein the entity reference matches an entity identifier in a catalog, such that multiple catalogs are searched indicating multiple matches. Therefore precedence is shown by the entity reference matching at least one entity identifier in at least one catalog.) to the document content of the overall final document. Furthermore, rules are applied to the document content. When the document developer is specifying content to be put into the final document, Poole clearly states it must meet the objectives of the parties to a transaction and to meet certain business, legal, and/or governmental rules and regulations. (Col 5, lines 3-24) Each document component is

linked to a business government regulation source. (Col 7, lines 28-60) Thus, rules are

applied to document content within the assembly facility.

Conclusion

16.   All claims are drawn to the same invention claimed in the parent application prior

to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could

have been finally rejected on the grounds and art of record in the next Office action if

they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE**

FINAL even though it is a first action in this case. See MPEP § 706.07(b). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no, however, event will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

17.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Nonomura et al (US PGPub 2005/0114763): Discloses the matching of document components.

- Nonomura et al (US Patent 7080067): Discloses the matching of document components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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